



Climate change and infectious diseases in New Zealand: A brief review and tentative research agenda

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Abstract:

AIMS: To review the literature on infectious diseases and meteorological and climate change risk factors in the New Zealand context and to describe a tentative research agenda for future work. **METHODS:** We performed literature searches in May 2010 using Medline and Google Scholar. We also searched five health-related government agencies in New Zealand for documentation on climate change and health. **RESULTS:** The effect of climate variability and change on vector-borne disease has been considered in more detail than any other infectious disease topic (nEuro Surveillance (Bulletin European Sur Les Maladies Transmissibles; European Communicable Disease Bulletin)20+ journal articles and reports relating to New Zealand). Generally, concern has arisen around the risk of new mosquito incursions and increased risks of dengue and Ross River fevers in the long term. For enteric diseases, the picture from five New Zealand publications is somewhat mixed, although the data indicate that salmonellosis notifications increase with higher monthly temperatures. One interpretation of the New Zealand data is that communities without reticulated water supplies could be more vulnerable to the effects of climate change-mediated increases in protozoan diseases. This information informed a tentative research agenda to address research gaps. Priorities include the need for further work on a more integrated surveillance framework, vector-borne diseases, enteric diseases, skin infections, and then work on topics for which we found no published New Zealand work (such as influenza and leptospirosis). Finally, we found that health-related government agencies in New Zealand have relatively little 'climate change and health' information on their websites. **CONCLUSIONS:** Although some informative work has been done to date, much scope remains for additional research and planning to facilitate prevention, mitigation, and adaptation responses in the New Zealand setting around climate change and infectious disease risks. The tentative research agenda produced could benefit from a wider critique, and government agencies in New Zealand could contribute to informed discussions by better documenting the current state of knowledge on their websites.

Source: Ask your librarian to help locate this item.

Resource Description

Communication:

resource focus on research or methods on how to communicate or frame issues on climate change;
surveys of attitudes, knowledge, beliefs about climate change

A focus of content

Communication Audience:

Climate Change and Human Health Literature Portal

audience to whom the resource is directed

Health Professional

Exposure :

weather or climate related pathway by which climate change affects health

Human Conflict/Displacement, Precipitation, Temperature

Geographic Feature:

resource focuses on specific type of geography

Freshwater

Geographic Location:

resource focuses on specific location

Non-United States

Non-United States: Australasia

Health Impact:

specification of health effect or disease related to climate change exposure

Dermatological Effect, Infectious Disease, Respiratory Effect

Infectious Disease: Airborne Disease, Foodborne/Waterborne Disease, Vectorborne Disease

Airborne Disease: Influenza, Other Airborne Disease

Airborne Disease (other): Legionellosis

Foodborne/Waterborne Disease: Campylobacteriosis, Leptospirosis, Salmonellosis

Vectorborne Disease: Mosquito-borne Disease

Mosquito-borne Disease: Dengue, Ross River Virus

Respiratory Effect: Other Respiratory Effect

Respiratory Condition (other) : Legionellosis

Resource Type:

format or standard characteristic of resource

Review

Timescale:

time period studied

Time Scale Unspecified